

I CLAIM:

1. A wireless intercommunicating apparatus comprising:

a wireless intercommunicating device including

a primary housing,

5 an antenna mounted on said primary housing,

a first switch member mounted on said primary housing,

a second switch member mounted on said primary housing,

10 a receiver mounted in said primary housing and interconnecting electrically said antenna and said first switch member for receiving an incoming radio frequency signal via said antenna, said receiver generating an audio signal corresponding to the incoming
15 radio frequency signal and outputting the audio signal via said first switch member,

a transmitter mounted in said primary housing and interconnecting electrically said second switch member and said antenna, and

20 a processor mounted in said primary housing, connected electrically to said receiver and said second switch member, generating a driving signal upon detecting generation of the audio signal, and outputting the driving signal via said second switch member; and

25 an auxiliary device including

an auxiliary housing,

an earphone switch port mounted on said auxiliary

housing and adapted to be connected to an earphone,

a first coupling member wiredly connected to said earphone switch port and connected detachably and electrically to said first switch member of said wireless intercommunicating device,

an auxiliary speaker mounted in said auxiliary housing and coupled to said earphone switch port,

said earphone switch port switching operation from a first state, where said first coupling member is connected electrically to said auxiliary speaker such that said auxiliary speaker reproduces the audio signal from said receiver of said wireless intercommunicating device when said earphone switch port is disconnected from the earphone, to a second state, where said first coupling member is disconnected from said auxiliary speaker and enables the earphone to reproduce the audio signal from said receiver of said wireless intercommunicating device when said earphone switch port is connected to the earphone,

an auxiliary microphone mounted on said auxiliary housing for receiving an incoming audio signal,

a second coupling member wiredly connected to said auxiliary microphone and connected detachably and electrically to said second switch member of said wireless intercommunicating device such that the incoming audio signal received by said auxiliary microphone is transmitted to said transmitter of said

wireless intercommunicating device via said second coupling member and said second switch member, and

a signal indicating unit connected electrically to said second coupling member and driven by the driving signal from said processor of said wireless intercommunicating device via said second switch member and said second coupling member so as to indicate receipt of the incoming radio frequency signal by said wireless intercommunicating device.

2. The wireless intercommunicating apparatus as claimed in Claim 1, wherein said auxiliary housing has a size smaller than that of said primary housing of said wireless intercommunicating device.

3. The wireless intercommunicating apparatus as claimed in Claim 1, wherein said wireless intercommunicating device further includes a current amplifying unit interconnecting electrically said processor and said second switch member for amplifying the driving signal from said processor.

4. The wireless intercommunicating apparatus as claimed in Claim 1, wherein said signal indicating unit includes a light emitting diode.

5. The wireless intercommunicating apparatus as claimed in Claim 1, wherein said signal indicating unit includes a vibration motor.

6. The wireless intercommunicating apparatus as claimed in Claim 1, wherein said wireless intercommunicating

device further includes

5 a primary speaker mounted in said primary housing
and coupled to said first switch member, said primary
speaker being connected electrically to said receiver
via said first switch member such that said primary
speaker reproduces the audio signal therefrom when said
first coupling member of said auxiliary device is
disconnected from said first switch member, said primary
speaker being disconnected from said receiver when said
10 first coupling member of said auxiliary device is
connected electrically to said first switch member, and

a primary microphone mounted on said primary housing
and coupled to said second switch member for receiving
an incoming audio signal, said primary microphone being
15 connected electrically to said transmitter via said
second switch member such that the incoming audio signal
received by said primary microphone is transmitted to
said transmitter when said second coupling member of
said auxiliary device is disconnected from said second
20 switch member, said primary microphone being
disconnected from said transmitter when said second
coupling member of said auxiliary device is connected
electrically to said second switch member.

7. The wireless intercommunicating apparatus as claimed
25 in Claim 1, wherein said auxiliary device further
includes a signal attenuating member coupled to said
earphone switch port for attenuating the audio signal

transmitted from said receiver of said wireless intercommunicating device to the earphone when said earphone switch port is in the second state.

5 8. The wireless intercommunicating apparatus as claimed in Claim 7, wherein said signal attenuating member is a resistor.

9. The wireless intercommunicating apparatus as claimed in Claim 1, wherein each of said first and second coupling members is a plug.

10 10. A wireless intercommunicating device comprising:
a housing;
an antenna mounted on said housing;
a first switch member mounted on said housing;
a second switch member mounted on said housing;
15 a receiver mounted in said housing and interconnecting electrically said antenna and said first switch member for receiving an incoming radio frequency signal via said antenna, said receiver generating an audio signal corresponding to the incoming
20 radio frequency signal and outputting the audio signal via said first switch member;
a transmitter mounted in said housing and interconnecting electrically said second switch member and said antenna; and
25 a processor mounted in said housing, connected electrically to said receiver and said second switch member, generating a driving signal upon detecting

generation of the audio signal, and outputting the driving signal via said second switch member.

11. The wireless intercommunicating device as claimed in Claim 10, further comprising a current amplifying unit mounted in said housing and interconnecting electrically said processor and said second switch member for amplifying the driving signal from said processor.

12. The wireless intercommunicating device as claimed in Claim 10, further comprising:

a speaker mounted in said housing and coupled to said first switch member, said speaker being connected electrically to said receiver via said first switch member such that said speaker reproduces the audio signal from said receiver; and

a microphone mounted on said housing and coupled to said second switch member for receiving an incoming audio signal, said microphone being connected electrically to said transmitter via said second switch member such that the incoming audio signal received by said microphone is transmitted to said transmitter.

13. An auxiliary device for use with a wireless intercommunicating device, the wireless intercommunicating device including

a primary housing,
an antenna mounted on the primary housing,
a first switch member mounted on the primary housing,

a second switch member mounted on the primary housing,
a receiver mounted in the primary housing and
interconnecting electrically the antenna and the first
switch member for receiving an incoming radio frequency
5 signal via the antenna, the receiver generating an
audio signal corresponding to the incoming radio
frequency signal and outputting the audio signal via
the first switch member,

a transmitter mounted in the primary housing and
10 interconnecting electrically the second switch member
and the antenna, and

a processor mounted in the primary housing, connected
electrically to the receiver and the second switch member,
generating a driving signal upon detecting generation
15 of the audio signal, and outputting the driving signal
via the second switch member,

said auxiliary device comprising:

an auxiliary housing;

an earphone switch port mounted on said auxiliary
20 housing and adapted to be connected to an earphone;

a first coupling member wiredly connected to said
earphone switch port and adapted to be connected
detachably and electrically to the first switch member
of the wireless intercommunicating device;

25 an auxiliary speaker mounted in said auxiliary
housing and coupled to said earphone switch port;

said earphone switch port switching operation from

a first state, where said first coupling member is connected electrically to said auxiliary speaker such that said auxiliary speaker reproduces the audio signal from the receiver of the wireless intercommunicating device when said earphone switch port is disconnected from the earphone, to a second state, where said first coupling member is disconnected from said auxiliary speaker and enables the earphone to reproduce the audio signal from the receiver of the wireless intercommunicating device when said earphone switch port is connected to the earphone;

an auxiliary microphone mounted on said auxiliary housing for receiving an incoming audio signal;

a second coupling member wiredly connected to said auxiliary microphone and adapted to connected detachably and electrically to the second switch member of the wireless intercommunicating device such that the incoming audio signal received by said auxiliary microphone is transmitted to the transmitter of the wireless intercommunicating device via said second coupling member and the second switch member; and

a signal indicating unit connected electrically to said second coupling member and driven by the driving signal from the processor of the wireless intercommunicating device via said second switch member and said second coupling member so as to indicate receipt of the incoming radio frequency signal by the wireless

intercommunicating device.

14. The auxiliary device as claimed in Claim 13, wherein
said auxiliary housing has a size smaller than that of
the primary housing of the wireless intercommunicating
5 device.

15. The auxiliary device as claimed in Claim 13, wherein
said signal indicating unit includes a light emitting
diode.

16. The auxiliary device as claimed in Claim 13, wherein
10 said signal indicating unit includes a vibration motor.

17. The auxiliary device as claimed in Claim 13, further
comprising a signal attenuating member coupled to said
earphone switch port for attenuating the audio signal
transmitted from the receiver of the wireless
15 intercommunicating device to the earphone when said
earphone switch port is in the second state.

18. The auxiliary device as claimed in Claim 17, wherein
said signal attenuating member is a resistor.

19. The auxiliary device as claimed in Claim 13, wherein
20 each of said first and second coupling members is a plug.